

**AMENDMENTS TO THE CLAIMS**

This listing of claims replaces all prior versions of claims in the application.

1. (Currently amended): A  $12\text{CaO} \cdot 7\text{Al}_2\text{O}_3$  compound, which incorporates a negative hydrogen ion ( $\text{H}^-$ ,  $\text{H}^{2-}$ ,  $\text{H}_2^-$ ) at a concentration of  $1 \times 10^{18} \text{ cm}^{-3}$  or more, which has an electronic conductance equivalent to an electric conductivity of  $10^{-5} \text{ Scm}^{-1}$  or more at a room temperature.
2. (Currently amended): A  $12\text{SrO} \cdot 7\text{Al}_2\text{O}_3$  compound, which incorporates a negative hydrogen ion ( $\text{H}^-$ ,  $\text{H}^{2-}$ ,  $\text{H}_2^-$ ) at a concentration of  $1 \times 10^{18} \text{ cm}^{-3}$  or more, which has an electronic conductance equivalent to an electric conductivity of  $10^{-5} \text{ Scm}^{-1}$  or more at a room temperature.
3. (Currently amended): A mixed crystal compound of  $12\text{CaO} \cdot 7\text{Al}_2\text{O}_3$  and  $12\text{SrO} \cdot 7\text{Al}_2\text{O}_3$ , which incorporates a negative hydrogen ion ( $\text{H}^-$ ,  $\text{H}^{2-}$ ,  $\text{H}_2^-$ ) at a concentration of  $1 \times 10^{18} \text{ cm}^{-3}$  or more, which has an electronic conductance equivalent to an electric conductivity of  $10^{-5} \text{ Scm}^{-1}$  or more at a room temperature.
- 4-6. (Cancelled).
7. (Previously presented): A method of producing the compound as defined in either one of claims 1 to 3, comprising subjecting either one selected from the group consisting of a  $12\text{CaO} \cdot 7\text{Al}_2\text{O}_3$  compound, a  $12\text{SrO} \cdot 7\text{Al}_2\text{O}_3$  compound, and a mixed crystal compound of  $12\text{CaO} \cdot 7\text{Al}_2\text{O}_3$  and  $12\text{SrO} \cdot 7\text{Al}_2\text{O}_3$ , to a heat treatment.

7Al<sub>2</sub>O<sub>3</sub> and 12SrO · 7Al<sub>2</sub>O<sub>3</sub> to a heat treatment at a temperature of 800°C or more in an atmosphere containing 1000 ppm or more of hydrogen, to thereby clathrate a negative hydrogen ion (H<sup>-</sup>, H<sup>2-</sup>, H<sub>2</sub><sup>-</sup>) into said selected compound at a concentration of 1 × 10<sup>18</sup> cm<sup>-3</sup> or more, and further irradiate said selected compound with ultraviolet ray or X-ray.

8. (Previously presented): A transparent electrode or wiring, which is formed using the compound as defined in either one of claims 1 to 3.

9. (Previously presented): An optically writable and erasable 3-dimensional electronic circuit and 3-dimensional storage element, which is formed using the compound as defined in either one of claims 1 to 3.

10. (Previously presented): A negative hydrogen ion (H<sup>-</sup>, H<sup>2-</sup>, H<sub>2</sub><sup>-</sup>)-conducting solid-electrolyte, which is formed using the compound as defined in either one of claims 1 to 3.

11. (Cancelled).